

## Reduction Mammoplasty

SURGICAL REDUCTION of the hypertrophic breast, although overshadowed by the more common and highly publicized operations for breast enlargement, has presented a technical and artistic challenge to the plastic surgeon for over a century. The lay public in general and a surprising number of physicians are still unaware that such an operation exists.

The indications for the operation are basically not cosmetic but rather more related to the relief of symptoms associated with excessive weight and bulkiness. As with any procedure affecting breast contour, however, cosmetic factors cannot be ignored. Progress has been slow and cosmetic results often poor due to the surgeon's preoccupation with problems of avascular necrosis. Before 1930, cumbersome multistaged procedures and free nipple grafting were resorted to out of respect for the high incidence of nipple necrosis which accompanied the dissection. An appreciation of the vascular supply of the nipple thereafter allowed single-stage nipple transposition operations with reasonable safety so long as extensive degrees of glandular resection were not needed.

In 1960, Strombeck introduced the principle of the dermis bridge which protected the nipple and virtually eliminated the complication of avascular necrosis even in the face of massive degrees of resection.

A new operation utilizing this same principle has recently been introduced which preserves the same safety features but allows greater freedom of pattern design so that the surgeon can now concentrate more fully upon the fine points affecting contour and offer the patient a more acceptable cosmetic result.

The breast is reduced to a bipedicle flap extending vertically from the inframammary fold to the new site to which the nipple is to be elevated. The flap is denuded of its epidermis to allow its burying and bears the nipple in its center. A brassiere-type pattern is preserved on either side. Most of the remaining breast tissue is resected and the new breast is constructed by folding the bipedicle, nipple-bearing flap upward and draping the brassiere skin flaps around the bulk.

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### REFERENCES

- Strombeck JO: Mammoplasty: Report of a new technique based on the two pedicle procedure. *Br J Plast Surg* 13:79-90, Apr 1960  
McKissock PK: Reduction mammoplasty with a vertical dermal flap. *Plast Reconstr Surg* 49:245-252, Mar 1972

## Repair of Cleft Palate with an Island Flap

RECONSTRUCTION OF A competent velopharyngeal sphincter mechanism is necessary if a person born with a cleft palate is to achieve natural and intelligible speech. The surgical management of this problem must incorporate two important features:

1. Restoration of the usual anatomical relationship with the palatal levator and tensor across the midline, fusing with the same muscle on the other side.
2. Creation of a palate of sufficient length to achieve contact with the superior pharyngeal constrictor, thereby effectively closing the oropharynx from the nasopharynx.

Recently a neurovascular island flap derived from palatal mucoperiosteum and based on the greater palatine vessels has been utilized for achievement of adequate permanent palatal lengthening. This island of oral mucosa is interpolated into a diamond-shaped defect on the nasal side of the palate that is created during the "pushback" procedure when nasal mucosa and abnormally inserted palatal muscles are divided from the posterior border of the hard palate. Inserting this tissue into the raw area on the nasal palatal surface prevents the contracture which would otherwise naturally occur during healing. This technique successfully provides a greater degree of palatal lengthening in most cases.

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### REFERENCES

- Millard DR: Ten years with the palatal island flap. *Plast Reconstr Surg* 46:510, Sept 7, 1970  
Millard DR: The island flap in cleft palate surgery. *Surg Gynecol Obstet* 116:297-300, Mar 1963

## Atrophy Following Cortisone Injection for Hypertrophic Scar

UNSIGHTLY HYPERTROPHIC AND KELOID SCARS resulting from trauma, infection, or surgical procedures have presented a difficult therapeutic challenge. Simple surgical excision frequently results in recurrence of the undesirable scar. The use of x-ray therapy has improved the chance for a favorable result but disappointing scars are still quite frequent. In the past 20 years, intralesional injections of various steroid preparations have greatly improved the success rates and have in many instances rendered surgical excision unnecessary.

Two undesirable side effects of intralesional

steroid injections have been encountered: cutaneous and subcutaneous atrophy and hypopigmentation of the skin at the site surrounding the injection. These effects can be minimized by using low concentrations of the injected agent—5 mg per ml triamcinolone acetonide—and avoiding injection into normal tissues surrounding the lesion. If atrophy or hypopigmentation do occur, they can be expected to resolve spontaneously in the great majority of cases simply with the passage of time (usually one to two years). The advantage of intralesional steroid therapy in treating hypertrophic and keloid scars will usually outweigh these potential disadvantages, but the patient should be informed of the possibility.

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#### REFERENCES

- Ketchum LD, Smith J, Robinson DW, et al: The treatment of hypertrophic scar, keloid and scar contracture by triamcinolone acetonide. *Plast Reconstr Surg* 38:209-218, Sept 1966
- Griffith H, Monroe CA, McKinney P: A follow-up study on the treatment of keloids with triamcinolone acetonide. *Plast Reconstr Surg* 46:145-150, Aug 1970

## Maxillo-Facial Injuries Following Accident

WITH THE TREMENDOUS USE the American people make of the automobile there are a large number of maxillo-facial injuries, most of them promptly and adequately treated. Even so, a significant number of patients are seen months after an accident with complications. These can be any of the following:

1. Malocclusion
2. Diplopia
3. Esthetic considerations
  - a. asymmetry of face
  - b. flatness of cheek
  - c. inequality of orbits
  - d. nasal irregularity
4. Numbness of cheek and nose
5. Lack of feeling in teeth
6. Pain due to pressure on sensory nerves
7. Inadequate excursion of the mandible
8. Chronic sinusitis due to poor drainage of sinuses
9. Obstruction to breathing
10. Facial paralysis
11. Naso-lacrimal duct obstruction
12. Growth deformities
13. Temporomandibular joint dysfunction

This range of complications underscores that the degree of tolerance to mal-reduction, mal-union, and mal-position is less in maxillo-facial fractures than in fractures generally.

In some instances, these complications can be corrected fully or partially. In other cases, the injury is such that the golden opportunity was lost at the time of the original treatment. Treatment of these complications usually requires re-creation of the original fractures. The presence of motor and sensory nerves, muscles of expression and mastication, teeth, and large vessels, calls for a finesse and preciseness of technique not required in re-creating fractures in other bones. The presence of scar tissue and distortion of structures by the original injury are further complicating factors. Therefore, it is of paramount importance that these complications be avoided if possible by prompt and adequate treatment of the original injury. The same basic principles apply to maxillo-facial fractures that apply to other fractures—reduction, fixation, and immobilization.

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#### REFERENCES

- Converse JM, Smith B, Obear MF, et al: Orbital blow-out fractures: A ten-year survey. *Plast Reconstr Surg* 39:20-36, Jan 1967
- Dingman RO, Constant E: A fifteen-year experience with temporo-mandibular joint disorders. *Plast Reconstr Surg* 44:119-124, Aug 1969

## Early Orthopedic Positioning and Bone Grafting in Treatment of Cleft Lip and Palate

PROBABLY THE MOST controversial procedures in cleft lip and palate repair today are early orthopedic positioning of the maxillary segments and bone grafting of the defects. The history of both procedures is somewhat parallel. The use of orthopedic positioning measures in the early care of cleft palate patients was first described by McNeil of England in 1950. He initially described the use of a prosthetic device in an attempt to obtain some spontaneous closure of the cleft on the assumption that apposition of bone occurred with stimulation of the cleft edges. There was also the desire to move the arch segments forward, particularly the smaller one, to obtain some closure of the anterior portion of the cleft. It was appreciated that the muscle tension against the prosthetic bridge, produced by chewing and sucking motions, did move the segments. The intention was